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EXAMINER

LEE, LAURA MICHELLE

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/599,602	<b>Applicant(s)</b> NIELSEN, ULRICH CARLIN	
	<b>Examiner</b> LAURA LEE	<b>Art Unit</b> 3724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 May 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 22-24, 26--28,30-32, 34-41, and 43-50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 22-24, 26--28,30-32, 34-41, and 43-50 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This office action is in response to the amendment filed on 5/16/2011 in which claims 22-24, 26-28, 30-32, 34-41 and 43-50, claims 45-50 are new, claims 22, 26-28, 30-32, 35-41, and 43 are currently amended.

#### ***Claim Objections***

2. Claim 32 is objected to because of the following informalities:

Claim 32, line 5, "at lest" should be -- at least--.

Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 44 and 49 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 44, recites that the "portion cutting profile is determined in advance of both the first and second cutting." However as applicant has amended claim 43, to recite "determining at least one physical attribute of the at least a portion of the strips using a second measuring device; and utilizing said at least one physical attribute of the at least a portion of the strips for second cutting said at least a portion of said strips into substantially rectangular pieces of the

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predetermined physical attribute at said second cutting stage" clearly the recitations of claim 44 conflict with the limitations of claim 43.

Claim 49, lines 1-2 recites "wherein said additional second cutting devices." There is a lack of proper antecedent to this claim for the second cutting devices. Changing the claim to recite -- wherein said one or more additional cutting devices" would overcome the 112 rejection. However, by making this change, claims 48 and 49 would be identical. The examiner is not sure what the applicant intended relative to the dependencies and language of claim 49.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 22-24, 28, 32, 34-35, 37-41, 43-50 are rejected under 35 U.S.C. 102(b) as being anticipated by Hicks et al. (U.S. Patent 6,549,823), herein referred to as Hicks. In regards to claim 22, Hicks discloses a method for portion cutting a food item (cheese) comprising the steps of: scanning at least one of a shape, a structure and/or a dimension of the food item at a first cutting stage by a measuring means (weighing and measuring station; height, width, length and weight measured; col. 1, lines 45-50); determining, using a processor (control processor CP), a portion cutting profile in connection with said scanning at the

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first cutting stage (col. 1, lines 50-53); cutting the food item into strips (11') at the first cutting stage (col. 1, lines 57-67) in accordance with said portion cutting profile; transporting said strips (11') from said first cutting stage to a second cutting stage (turntable; col. 2, lines 1-2); and cutting the strips into substantially rectangular pieces (13) of predetermined weight and/or dimension at said second cutting stage on the basis of additional scanning of at least one of a shape, a structure or a dimension of the strips at the second stage (col. 2, lines 2-12),

wherein said step of determining a portion cutting profile at the first cutting stage comprises determining a predetermined dimensions and/or weights for the cutting up of said strips into said substantially rectangular pieces on the basis of said at least one of a shape, a structure, and/or a dimension of said food item scanned at the first cutting stage and on the basis of said predetermined weight and/or dimensions (col. 1, lines 54-58).

In regards to claims 23 and 34, Hicks discloses wherein said determining said portion-cutting profile comprises the step of planning the whole of a cutting sequence (CP; col. 1, lines 50-52).

In regards to claim 24 and 35, Hicks discloses wherein at least a part of said portion cutting profile is carried out in said first cutting stage (i.e the vertical or horizontal cutting; col. 1, lines 50-53)

In regards to claim 28 and 37, Hicks discloses wherein at least a part of said portion cutting profile (weight/ Height/ length) is communicated further to the second cutting stage (col. 2, lines 2-6).

In regards to claim 38, Hicks discloses wherein said transporter is a conveyor (conveyor / turntable) for transferring one or more of the strips from the first cutting device to at least one (8') of the one or more additional cutting devices.

In regards to claim 32 and 39, Hicks disclose the step of non-manually placing the food item in a first cutting device (6,7; the block weight 640 lbs; see col. 1, line 13) and/or non-manually transferring the strips to one or more of the additional cutting devices.

In regards to claim 40, Hicks discloses wherein a feeding direction of the one or more additional cutting devices are different from that of the first cutting device. In the first cutting device, the feeding direction is across the width of the cheese and in the second cutting device the feeding direction is across the length of the cheese.

In regards to claim 41, Hicks discloses an apparatus for portion cutting a food item into pieces of substantially rectangular shape, comprising: a first cutting device (6'/7') including first measuring means (weighting and centering station ; col. 1, lines 47-50) for scanning at least one of a shape, a structure and/or a dimension of the food item (weight, height, length); a processor (control processor; col. 1, line 51) for determining a portion cutting profile (cut geometry) in connection with said scanning; a first cutting unit (metal wires) included in said first cutting device (6'/7') for cutting the food item into strips (layers 11') in accordance with said portion cutting profile; a transporter (conveyor/ turntable) for transporting said strips to one or more additional cutting devices and said one

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or more additional cutting devices(8'), said one or more additional cutting devices (8'), each comprising further measuring means (measuring the width; col. 2, lines 2-3) for scanning at least one of a shape, a structure and/or a dimension of the strips and a cutting unit for cutting the strips into substantially rectangular pieces (3) of predetermined weight and/or dimension, wherein said portion cutting profile comprises determined dimensions and or weight for the cutting up of said food item into said strips and for the cutting up of said strips into said substantially rectangular pieces (col. 2, lines 54-58).

In regards to claim 43 and 44, Hicks discloses a method for portion cutting a food item, comprising the steps of determining at least one physical attribute of the food item using a first measuring device (weighting and centering station; col. 1, lines 47-50); determining, using a processor, (control processor; col.1, line 51) a portion cutting profile utilizing said at least one physical attribute of the food and a desired physical attribute;

first cutting the food item into strips (11') at the first cutting stage (6/7) by cutting in a first cutting direction(across the length of the block of cheese), said cutting performed in accordance with said portion cutting profile;

transporting (turntable) at least a portion of said strips to a second cutting stage (8');

after said transporting, determining at least one physical attribute of the at least a portion of the strips using a second measuring device (measuring the width);

and utilizing said at least one physical attribute of the at least a portion of of the strips for second cutting said at least a portion of said strips into substantially rectangular pieces of the predetermined physical attribute at said second cutting stage by cutting in a second cutting direction (across the width of the cheese) (see col. 2, lines 2-6).

In regards to claim 45, Hicks discloses wherein said second cutting direction (across the length) is substantially perpendicular to said first cutting direction (across the width).

In regards to claim 46, Hicks discloses wherein said transporting includes changing a direction of travel of said strips (via the turntable).

In regard to claim 47, Hicks discloses wherein said transporter (turntable) changes a direction of travel of said strips (relative to the strips).

In regards to claims 48 and 49 as best understood, Hicks discloses wherein said one or more additional cutting devices (1 device 8') has substantially parallel feeding directions (its parallel with itself ) arranged such that each cutting stage cuts a different subset of said strips into pieces (the single cutting device cuts the strips, wherein the subset includes of all of strips). Applicant has not positively claimed a second cutting device.

In regards to claim 50, Hicks discloses wherein said transporting includes changing a direction (relative to the strips) of travel of said strips (via turntable).

***Claim Rejections - 35 USC § 103***



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7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hicks et al. (U.S. Patent 6,549,823), herein referred to as Hicks. In regards to claim 31, Hicks discloses the claimed invention except the step of manually placing the food items in the first cutting device or manually transferring the strips to a second cutting device. However, it is first noted that there are only two ways of transferring the food items from the first device to the second device; manually and non-manually. Utilizing one means or the other is a simple replacement of the only other available option. Hicks discloses the use of a turntable or non-manual movement of the food items from the first to second cutting stage. It would have been obvious to one having ordinary skill in the art at the time of the invention to have eliminated the turntable, for manual movement of the food product between one stage to the next to reduce the complexity of the cutting operation.

9. Claims 26 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hicks et al. (U.S. Patent 6,549,823), herein referred to as Hicks in view of Rosenberger (U.S. Publication 2002/0035905) and Vogeley Jr. et al. (U.S. Patent 5,937,080), herein referred to as Vogeley. In regards to claim

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26 and 36, the device of Hicks discloses the claimed invention except wherein scanning of the shape, structure, and/or dimension of the strips is performed in the two or more additional cutting devices of the second cutting stage. Hicks already discloses scanning the length of the cheese before slicing it in the second cutting stage. Hicks only discloses a singular cutting device and doesn't disclose that there are two cutting devices. However, attention is directed to the Rosenberger and Vogeley references. Rosenberger discloses a method for subdividing a block of frozen foodstuff into small portions by a multi-stage sawing process. A conveyor system transports the foodstuffs between the saws and separates the cut portions along at least two parallel paths to maximize the processing of the foodstuffs thus the cutting loss is minimized and the yield of portions optimized. Vogeley discloses a means for optimizing the slabbing of meat and trimming fat from the slab by scanning and weighting the cross section of the slab. Vogeley discloses after first cutting the meat slab into the sections, the sections are placed on a conveyor traveling perpendicularly from the original cutting direction to the fat trimmer. As Hicks teaches that the cheese block can be used either as a whole or one layer 11' at a time (col.2 ,lines 6-7), and as Rosenberger teaches pushing multiple layers at a time and Vogeley also discloses conveying the sliced portions in a perpendicular direction, it similarly would have been obvious to have applied the teachings of Rosenberger and Vogeley to the Hicks apparatus to have multiple layers being advanced through separate second cutting stations at the same time to increase the speed and yield of the cutting operation.

10. Claims 27 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hicks et al. (U.S. Patent 6,549,823), herein referred to as Hicks in view of Rosenberger (U.S. Publication 2002/0035905) and Vogeley Jr. et al. (U.S. Patent 5,937,080), herein referred to as Vogeley. In regards to claims 27 and 30, Hicks discloses the claimed invention except wherein a feeding direction of two or more additional cutting devices of the second cutting stage lies substantially at right angles to a feeding direction for a first cutting device. Hicks already discloses rotating the cheese block to present another face for slicing during the second cutting stage, but does not disclose that there are two cutting devices.

11. Claims 26 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hicks et al. (U.S. Patent 6,549,823), herein referred to as Hicks in view of Rosenberger (U.S. Publication 2002/0035905) and Vogeley Jr. et al. (U.S. Patent 5,937,080), herein referred to as Vogeley. In regards to claim 26 and 36, the device of Hicks discloses the claimed invention except wherein scanning of the shape, structure, and/or dimension of the strips is performed in the two or more additional cutting devices of the second cutting stage. Hicks already discloses scanning the length of the cheese before slicing it in the second cutting stage. Hicks only discloses a singular cutting device and doesn't disclose that there are two cutting devices. However, attention is directed to the Rosenberger and Vogeley references. Rosenberger discloses a method for

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subdividing a block of frozen foodstuff into small portions by a multi-stage sawing process. A conveyor system transports the foodstuffs between the saws and separates the cut portions along at least two parallel paths to maximize the processing of the foodstuffs thus the cutting loss is minimized and the yield of portions optimized. Vogeley discloses a means for optimizing the slabbing of meat and trimming fat from the slab by scanning and weighting the cross section of the slab. Vogeley discloses after first cutting the meat slab into the sections, the sections are placed on a conveyor traveling perpendicularly from the original cutting direction to the fat trimmer. As Hicks teaches that the cheese block can be used either as a whole or one layer 11' at a time (col.2 ,lines 6-7), and as Rosenberger teaches pushing multiple layers at a time and Vogeley also discloses conveying the sliced portions in a perpendicular direction, it similarly would have been obvious to have applied the teachings of Rosenberger and Vogeley to the Hicks apparatus to have multiple layers being advanced through separate second cutting stations at the same time to increase the speed and yield of the cutting operation.

### ***Response to Arguments***

12. Applicant's arguments with respect to claims 22-50 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

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13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LAURA LEE whose telephone number is (571)272-8339. The examiner can normally be reached on Monday through Friday, 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on (571) 272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Laura M Lee/  
Primary Examiner, Art Unit 3724  
8/1/2011